



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,704	02/21/2006	Monilola Olayioye	DAV1186.004APC	6939

20995 7590 04/18/2007
KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER

MONDESI, ROBERT B

ART UNIT	PAPER NUMBER
----------	--------------

1652

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
31 DAYS	04/18/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 31 DAYS from 04/18/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
eOAPilot@kmob.com

Office Action Summary	Application No.	Applicant(s)	
	10/538,704	OLAYIOYE ET AL.	
	Examiner	Art Unit	
	Robert B. Mondesi	1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-32 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-15, drawn to an isolated nucleic acid molecule encoding the amino acid sequence having 40% identify to SEQ ID NO:5 or 6 (StarD10) and an isolated vector comprising the said nucleic acid molecule.

Group II, claim(s) claim 16 in part, 17-21 drawn to amino acid sequence having 40% identifyof higher to SEQ ID NO: 5 or 6 (StarD10).

Group III, claim(s) claim 16 in part, drawn to a ribonucleotide sequence corresponding to a nucleic acid sequence having about 40% similarity to SEQ ID NO: 4 which encodes a StarD10 protein.

Group IV, claim(s) 22-23, drawn to an isolated antibody to an amino acid sequence having at least 40% identity to SEQ ID NO:5 or 6 (StarD10).

Group V, claim(s) 24, drawn to a method for detecting StarD10 in a biological sample from a subject, said method comprising contacting said biological sample with an antibody specific for StarD10 or its derivatives or homologs for a time and under conditions sufficient for an antibody-StarD10 complex to form, and then detecting said complex.

Group VI, claim(s) 25, drawn to method for detecting an aberrant cell in a subject or in a biological sample from said subject, said method comprising contacting cells or cell extracts from said subject or said biological sample with an immunointeractive molecule specific for StarD10 or an antigenic portion thereof and screening for the level of immunointeractive molecule-StarD10 complex formations wherein an elevated presence of said complex relative to a normal cell is indicative of an aberrant cell..

Art Unit: 1652

Group VII, claim(s) 26-27, drawn to a method for detecting an aberrant cell in a subject or in a biological sample from said subject, said method comprising contacting cells or cell extracts from said subject or said biological sample with an immunointeractive molecule specific for StarD10 or an antigenic portion thereof and screening for the level of immunointeractive molecule-StarD10 complex formations wherein an elevated presence of said complex relative to a normal cell is indicative of an aberrant cell.

Group VIII, claim(s) 28, drawn to a method for diagnosing the presence of cancer or cancer-like growth in a subject, said method comprising contacting cells or cell extracts from said subject or a biological sample from said subject with a StarD10-binding effective amount of an antibody having specificity for said StarD10 or an antigenic determinant or epitope thereon and then quantitatively or qualitatively determining the level of a StarD10-antibody complex wherein the presence of elevated levels of said complex compared to a normal cell is indicative of the presence of a cancer.

Group IX, claim(s) 29, drawn to a A method for diagnosing the presence of a cancer in a subject, said method comprising obtaining mRNA from cells of said subject or from a biological sample from said subject and optionally generating cDNA and contacting said mRNA or cDNA with a genetic probe capable of hybridizing to and/or amplifying all or part of a StarD10 nucleotide sequence encoding StarD10 or its complementary nucleotide sequence and then detecting the level of said mRNA or cDNA wherein the presence of elevated levels of said mRNA or cDNA compared to normal controls is indicative of the presence of cancer.

Group X, claim(s) 30, drawn to a method for the treatment of a patient having cancer, said method comprising administering to said human, a cancer cell growth inhibiting-effective amount of an antibody having specificity for human StarD10 protein, wherein said antibody is substantially non-immunogenic and further comprises a cell growth inhibiting or cell killing agent fused, bound or otherwise associated thereto.

Group XI, claim(s) 31, drawn to a method for the treatment of a patient having cancer, said method comprising administering to said patient, a genetic composition comprising a genetic construct which down-regulates expression of a StarD10 gene encoding StarD10.

Group XII, claim(s) 32, drawn to a method for the treatment of a patient having cancer, said method comprising administering to said patient, a genetic composition comprising a genetic construct comprising a nucleotide sequence substantially as set forth in SEQ ID NO:4 or a fragment thereof or a nucleotide sequence having at least about 40% similarity to SEQ ID NO:4 after optimal alignment or a nucleotide sequence capable of hybridizing to SEQ ID NO:4 its complementary form under low stringency conditions, wherein SEQ ID NO:4 encodes a StarD10 protein.

The inventions listed as Groups I-XII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The technical feature linking Groups I-XII appears to be that all relate to a StarD10 having at least 40% identity to SEQ ID NO: 5 or 6; however, Lai C. H. et al. (Genome Res. 2000 May, Vol. 10, No.5, pages 703-713), disclose amino acid sequences that are 100% identical to the amino acid sequence of SEQ ID NO: 5 or 6, see NCBI Protein accession no. AAD34047 (cited in the International Search Report PCT/ISA/210).

Therefore the technical feature linking the inventions of Groups I-XII does not constitute a special technical feature as defined by PCT Rule 13.2, as it does not define a contribution over the prior art.

Accordingly, Groups I-XII are not so linked by the same or a corresponding special technical feature as to form a single inventive concept.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

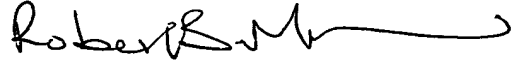
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Mondesi whose telephone number is 571-272-0956. The examiner can normally be reached on 9am-5pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on 571-272-0928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1652

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert B Mondesi
Examiner
Art Unit 1652



4-11-07